

# MidAmerican Energy Company

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## Expected Peak Demand

- 2002 Net Peak Demand Forecast
  - 3,924 MW for normal weather
- 2001 Actual Peak Demand
  - 3,758 Net, (3,935 MW gross - before demand-side management)
- 10-year growth in Peak Demand
  - 1991 peak was 3,289 MW
  - 2001 peak was 3,758 MW
  - 10-year growth rate in peak demand: 1.4% per year

## “Worse-case” Expected Peak Demand

- Normal Weather Demand – 3,924 MW
  - Based on 30 years of historical weather conditions.
- Hot Weather Demand – 4,107 MW
  - Based on weather conditions that occur only 30% of the time.
- Extreme Weather Demand – 4,302 MW
  - Based on weather conditions that occur only 5% of the time.

## Available Resources

- Net Capacity – 4,708 MW
  - Owned Generation – 4,081 MW
  - Purchases – 969 MW
  - Sales to other utilities – 342 MW
- Demand-side Management – 189 MW
  - Direct load control - 44 MW
  - Interruptible Demand - 145 MW

## Transmission Loading

- MEC expects its system to perform well.
  - No facilities loading above their nameplate rating for system normal conditions at both expected peak and worse-case summer peak.
  - Only one facility may load above nameplate (but within emergency rating) for a specific system outage – loss of 130 MW Riverside Generating Station. Moline quick start combustion turbines can be used to reduce loading to an acceptable level.

## Historical Peak Demand Forecasts

- Comparison (in MW) – Forecast net peak versus actual peak.

	Forecast	Actual
<u>Year</u>	<u>Peak</u>	<u>Peak</u>
2001	3,782	3,758
2000	3,804	3,626
1999	3,604	3,808
1998	3,561	3,620
1997	3,464	3,539